

ABSTRACT OF THE DISCLOSURE

A multi-modulation mode air interface frame format, and related methods for carrying traffic on the multi-modulation mode air frame format, including an overhead portion including a first plurality of time slots and a plurality of overhead bursts located within respective ones of the first plurality of time slots.

The frame format also includes a traffic portion including a second plurality of time slots following the first plurality of time slots and a plurality of traffic bursts, wherein respective ones of the plurality of traffic bursts are located within one or more of the second plurality of time slots. And each of the plurality of traffic bursts are modulated using a respective one of a plurality of modulation modes.

Furthermore, a multi-transport mode air interface frame format, and related methods, that includes an overhead portion as above and a traffic portion including a second plurality of time slots following the first plurality of time slots following the first plurality of time slots, and a plurality of traffic bursts located within one or more of the second plurality of time slots and a plurality of transport mode signals contained within respective ones of the plurality of traffic bursts.